



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,854	07/22/2003	Kazuya Kimura	SUNSTAF-1025	6549
7590	06/08/2006		EXAMINER	
KNOBLE & YOSHIDA, LLC Eight Penn Center Suite 1350 1628 John F. Kennedy Blvd. Philadelphia, PA 19103			TAMAI, KARL I	
			ART UNIT	PAPER NUMBER
			2834	
			DATE MAILED: 06/08/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/624,854	KIMURA ET AL.	
	Examiner Tamai I.E. Karl	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 23 March 2006.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3,5-10,13-20 and 22 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3,5-10,13-20 and 22 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Specification***

1. The substitute specification filed 3/23/2006 has been entered.

***Claim Rejections - 35 USC § 102***

2. The rejection of Claims 1, 2, 4-6, 8, 11, and 15 under 35 U.S.C. 102(b) over Linscott,Jr. (US 4250423) is withdrawn.
3. The rejection of Claims 1, 2, 5, 6, 8, 13-15, and 20 under 35 U.S.C. 102(b) over Hunt (US 4888510) is withdrawn.
4. The rejection of Claims 1-3, 5, 6, 8, 15, 16, and 20 under U.S.C. 102(b) over Iseman (US 5218252) is withdrawn.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. 1-3, 5, 6, 8, 13, 15, 16, 20, and 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Iseman (US 5218252) and Smerud et al. (US 6000917). Iseman teaches a dynamo having an elastic housing with a different (greater or lesser) coefficient of thermal expansion than the circular stator core. The stator having a channel in the outer surface between three (or more) equally spaced projections 26, and Iseman teaches the projections can be formed on the inner surface of the housing (col. 7, line 10). Iseman shows the contact area being smaller than the void area and shows the ratio of the first to second area being less than 30%. Iseman teaches the number of elastic parts being five or less. Iseman teaches every aspect of the invention except the dynamo being a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces. Smerud teaches a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces to cool the motor by the suctioned gas. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman with a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces to effectively cool the motor.

8. Claims 1, 2, 5, 6, 8, 13-15, and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hunt (US 4888510) and Smerud et al. (US 6000917). Hunt teaches a dynamo having an elastic housing with a greater coefficient of thermal expansion than the circular stator core. The stator having a channel 22 in the outer surface and the housing having recesses 27 formed by the concave flexing of the housing away from the core. Hunt shows the contact area being smaller than the void area. Iseman teaches every aspect of the invention except the dynamo being a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces. Smerud teaches a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces to cool the motor by the suctioned gas. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Hunt with a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces to effectively cool the motor.

9. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252) or Hunt (US 4888510), in further view Smerud et al. (US 6000917) and Brown (US 2735950). Iseman or Hunt and Smerud teach every aspect of the invention except the tab positioned at unequal angles and the recess having a thinned portion with a concave shape. Brown shows the positioning projections 30, 38

being spaced at unequally to allow for air passage and mounting bolts. Brown shows the recesses 40 being radially thinner than the tab portions and having concave inner surfaces. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman or Hunt and Smerud with the positioning tabs being at unequal angles and concave recesses to accommodate air passages and mounting bolts, as shown in Brown.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252) or Hunt (US 4888510), and Smerud et al. (US 6000917). Iseman or Hunt, and Smerud teach every aspect of the invention except the ratio of the radial differential being 0.5-1.5%. Iseman teaches the angular position and the radial dimension of the protrusions can be varied to meet the operating characteristics of the dynamo. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman or Hunt, and Smerud with the ratio of the radial differential being 0.5-1.5% to optimize the performance of machine, as taught by Iseman.

11. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252) or Hunt (US 4888510), and Smerud et al. (US 6000917) and Murakami et al. (WO 02/31947)(US 6836045 provided as an translation). Iseman or Hunt, and Smerud teach every aspect of the invention except the windings being intensive or distributive wound. Murakami teaches that compressor motors can be

Art Unit: 2834

wound with either concentrated (intense) (figure 4) or distributed windings (figure 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman or Hunt and Smerud with the stator core having wound or concentrated windings to effectively drive a scroll compressor as taught by Murakami, and because selection between known equivalents is within the ordinary skill in the art.

12. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252) or Hunt (US 4888510) and Smerud et al. (US 6000917) and Hattori (US 5998904). Iseman or Hunt and Smerud teach every aspect of the invention except the stator core being silicon steel. Hattori teaches the stator core being silicon steel and driving a gas compressor. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman or Hunt and Smerud with the stator core being silicon steel and the dynamo being a gas compressor because Hattori teaches the material is a preferred material in dynamo electric machines and because selection of the material based on the intended use is within the ordinary skill in the art (See *In re Leshin*, 125 USPQ 416).

#### ***Response to Arguments***

13. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new grounds of rejection. Applicant's argument regarding the cited references are not persuasive. The Applicant cannot show nonobviousness by

attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Conclusion***

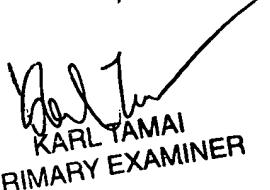
14. Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (571) 272 - 2036.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg, can be reached at (571) 272 - 2044. The facsimile number for the Group is (571) 273 - 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KARL I TAMAI  
PRIMARY EXAMINER

Karl I Tamai  
PRIMARY PATENT EXAMINER  
June 5, 2006